

# Maine Section 319 Nonpoint Source Management Program Quality Assurance Program Plan

Maine Department of Environmental Protection

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## I. Introduction

The purpose of this document is to describe the process used to manage the Section 319 program in Maine and how quality assurance concerns are addressed in this process. This document will serve as an overall quality assurance project plan (QAPP) for most projects funded with Section 319 funds in Maine. Projects not covered by this QAPP are described in section II, below. The QAPP will be reviewed internally (by MDEP) on an annual basis, and any modifications to the QAPP or attachments will be incorporated and distributed as needed. In addition, the QAPP will need to be reviewed, updated and re-submitted to EPA for re-approval every five years to ensure that it is current.

## II. Program Objectives and QAPP Applicability

The overall objective of the Maine Nonpoint Source Management Program is to prevent, control, or abate nonpoint source pollution to lakes, streams, rivers and coastal waters so that beneficial uses of those waters are maintained or improved. MDEP uses Section 319 funds and state funds, to support a variety of Nonpoint Source Pollution (NPS) projects to help achieve this objective. MDEP manages use of 319 funds in accordance with National NPS Program Guidelines published by EPA.

DEP administers a grants program to provide financial assistance (subgrants of Section 319 funds) to help subgrantees conduct NPS Projects). NPS projects implement actions in a specific watershed to help restore or protect a lake, stream, or coastal water that is impaired or considered threatened by polluted runoff. NPS projects help local communities recognize water pollution sources in watersheds and take action to restore or protect clean water.

This QAPP is intended to cover all NPS Projects, except projects that include environmental monitoring. Projects involving the collection and analysis of water quality samples will require a Quality Assurance Project Plan or other Quality Plan (*e.g.*, Sampling & Analysis Plan) developed in accordance with the MDEP Quality Management Plan (Section 7.3 or 7.4) and EPA Requirements for Quality Assurance Project Plans, EPA QA/R-5, March 2001.

## III. Program Quality Objectives

This QAPP addresses several different types of NPS projects, and the program quality objectives vary for each type of project. For NPS Watershed Survey projects, the objectives are to find and describe NPS problem sites, and to target remediation efforts and recommend the Best Management Practices (BMPs) needed to control or prevent pollution throughout a watershed. NPS Watershed Surveys provide essential information for planning and implementing NPS Watershed Projects. The objective of NPS Watershed Projects is to focus implementation efforts throughout a watershed to the extent that water quality will be protected or measurably improved. A NPS Watershed Project is designed so that BMPs are selected, designed and installed properly and in a quantity that will lead to significant reductions of NPS pollution to the waterbody. A NPS Watershed Management Plan may be necessary in certain project areas,

namely, those in large watersheds, areas with multiple NPS categories, and involving several municipalities and stakeholders. The objectives of a NPS Watershed Management Plan are to develop and promote the use of a locally-supported plan to guide pollution control and prevention activities throughout the watershed, and to identify and formally recognize the roles of participating project sponsors and stakeholders. NPS Watershed Management Plans are reviewed by the MDEP program to assure that quality objectives are accounted for.

Collectively, NPS surveys, management plans and watershed-wide implementation projects are designed to prompt landowner installation of BMPs at specific NPS sites throughout a watershed. The pollutant loads controlled (i.e., nutrients and sediments) as a result of implementation efforts are estimated roughly, through the use of simple models, and in accordance with EPA guidelines. Rough estimates are suitable for Section 319 program needs because EPA uses the estimates primarily to track pollutant reduction trends on a national basis. Further, MDEP and grantees use the estimates as a means to report one of the benefits of an NPS project.

The quality assurance requirements for NPS Projects are addressed through the following documents:

- MDEP Request for Proposals FY 2006 Grants for Nonpoint Source Pollution Control Projects, April 2005 (or current year, as applicable). This document includes Instructions for Work Plan Content & Format and the template for a Grant Agreement.
- Grant Agreement Template. Grantees are obliged to administer the project in accordance with the Grant Agreement (contract). The Grant Agreement describes Grantee responsibilities in 3 riders: Rider A. Specifications of Services to be Provided (includes the Project Work Plan); Rider B. Methods of Payment and Other Provisions; and Rider C. Certifications
- NPS Grant Administrative Guidelines - Maine Nonpoint Source Grants Program, October 15, 2004. Grant agreements for NPS Projects require grantees to use these Guidelines to comply with reporting requirements. The guidelines: (1) detail reporting requirements, and (2) provide other information to help Grantees and DEP staff administer NPS projects to comply with the Grant Agreement.
- Pollutants Controlled Report, L&W Document # DEP LW 0689 10/05. Report form provides instructions to grantees for estimating and reporting pollutant load reduction and resource protection accomplished during NPS Projects for the EPA database - the Grant Records Tracking System (GRTS).
- Standard Operating Procedures For Filing Documents and Records Pertaining to Nonpoint Source Projects for the Bureau of Land & Water Quality (BLWQ) 12/04. This Standard Operating Procedure (SOP) applies to all DEP staff who develop or utilize Nonpoint Source Project files funded through the NPS Grants Program. This SOP is to ensure that: NPS Project files are properly created & maintained and contain pertinent documents and records and DEP personnel can easily access NPS project files.

- State BMP Guidance Manuals are accessible from the MDEP Nonpoint Source Training & Resource webpage <http://www.state.me.us/dep/blwq/training/npspubl.htm#bmp>
- Applying for and Administering CWA Section 319 Grants: A Guide for State Nonpoint Source Agencies. March, 2003. US EPA Manual

#### IV. Program Design

Most Section 319 funded projects in Maine are selected through a competitive request for proposal (RFP) process. MDEP prepares and releases an RFP to the public once a year in March or April. The RFP is drafted by the NPS Grants Section of the Watershed Management Division (DEP organization chart attached) and reviewed and approved by the EPA Nonpoint Source Coordinator for Maine. Both MDEP priorities and EPA national NPS Guidelines are considered during RFP preparation. The RFP requirements, evaluation criteria, and project selection process are summarized below. DEP is obliged to comply with Chapter 110 - Rules For the Purchases of Services and Awards which outlines procedures for purchasing services and awarding grants pursuant to Maine law 5 M.R.S.A. 1825-C. Prior to RFP issuance, MDEP hosts workshops to provide information for interested parties regarding planning and implementing NPS projects. During the RFP process DEP provides a summary of all questions received and MDEP responses regarding the RFP.

##### Proposal Requirements

The RFP describes funding priorities, project eligibility, evaluation criteria, and program requirements. An accompanying document titled "Instructions for Work Plan Content and Format" lays out the recommended format and content of workplans/proposals submitted in response to the RFP. This document describes how the following sections should be addressed in project workplans: project title, grantee, watershed information, problem / need, purpose, project duration, general project plan, tasks, schedules & estimated costs, deliverables, interagency coordination, project outcome, environmental results, project coordinator, and budget information.

##### Proposal Selection Criteria

As described in the RFP, the following evaluation criteria are used in the scoring of proposals:

A. 30 points *Feasibility for Success*. Is the project likely to achieve its objectives successfully?

1. For All Projects:

Considerations - effective actions; well sequenced; proven techniques; contribution and/or participation by appropriate stakeholders and municipal government; leveraged with other previous or concurrent efforts; and

2. For *NPS Watershed Projects*:

Are the important NPS sites adequately identified (watershed survey or other assessment)? Prospect that a sufficient number of NPS sites be treated with BMPs to

achieve a significant level of pollutant load reduction to protect or improve a waterbody?  
Prospect that the project will substantially contribute to protection or improvement of a waterbody.

3. For *Watershed Management Plan* or *NPS Watershed Survey*:

How well does the proposal meet the "project design objective" for the project type?  
Prospect that the Survey or Plan will prompt effective follow-up actions to protect or improve a waterbody?

B. 25 points *Cost Effectiveness*. Are project cost estimates reasonable with regard to the activities, tasks, personnel, deliverables, budget cost categories, and schedules described in the work plan? Amount and quality of proposed matching funds or services.

C. 20 points *Applicant Qualifications, Past Performance and Presentation*. Adequacy of the applicant qualifications to carry out the project (relevant experience, financial, administrative & technical qualifications, personnel and facilities) within the proposed timeframe. Consider any known past performance on relevant projects. How well did the applicant follow the RFP Instructions for Preparing Proposals.

D. 10 points *NPS Pollution Problem / Need*. How well does the work plan exhibit an informed understanding of the nature, extent, and severity of the NPS water pollution problems and needs?

E. 5 points *Relative Value of the Waterbody*. The relative value of the waterbody considering uses by people, fish and other aquatic life. Uses include but are not limited to: recreational; valued fisheries; threatened or endangered species; public drinking water supply; commercial uses; etc.

F. 5 points *NPS Priority Watershed*. Is the project designed benefit a waterbody listed on the NPS Priority Watersheds list? (if yes, 5 points). A tributary waterbody qualifies for the 5 points provided the tributary is located within the direct drainage of a waterbody named on the NPS Priority Watersheds List. "Direct drainage" means surface area that drains to a given waterbody without first passing through an upstream lake.

G. 5 points *Comprehensive Plan*. Does the town (or towns) involved in the project have an adopted Comprehensive Plan and Zoning Ordinance that the State Planning Office has determined is consistent with Maine's Comprehensive Planning and Land Use Regulation Act?

Proposal Review, Selection and Approval Process

Proposals received under the RFP are evaluated by a review committee and the EPA NPS Coordinator for Maine. Any considerations related to Section 319 eligibility and compliance with the Section 319 national guidelines are raised by the EPA NPS Coordinator before the committee completes its evaluation. Review committee members rank each proposal based on the RFP evaluation criteria. DEP funds the higher ranked projects according to the rank order of the scores. Once the committee has completed evaluation of all the proposals, then the MDEP

nonpoint source coordinator prepares a written summary of proposed award decision for review and approval by the DEP Division Director, the Maine Department of Administrative & Financial Services, Division of Purchases, and EPA. Upon acceptance, the MDEP nonpoint source coordinator sends the award decision to each RFP respondent.

For each project selected, MDEP will ask the applicant to submit a revised work plan, taking into account the comments received from the review committee, MDEP and EPA. Following the submittal of a revised work plan the MDEP and EPA will conduct a final review. MDEP will accept the work plan for contract preparation after determination that the applicant has adequately addressed the review comments. After EPA provides the Federal grant funds to DEP, then DEP will prepare Grant Agreements for accepted project work plans. All Grant Agreements need to be approved and signed by the Director of the Bureau of Land & Water Quality. Projects involving complex or relatively costly BMP installations require DEP review and acceptance of site designs prior to construction. Otherwise, a subgrantee exercises professional judgement in the selection, design and installation of the BMPs for NPS sites.

#### Load Reduction Estimates

National Section 319 program guidelines require that load reduction estimates be developed for certain projects – projects that will result in load reductions of either sediment or nutrients (nitrogen and phosphorous). EPA recognizes that due to variability in site and weather characteristics (among other factors), load reductions associated with BMP projects are extremely difficult to derive accurately. Accordingly, load reduction estimates for Maine Section 319 projects are developed using simple models or equations and calculated by the subgrant recipient. DEP and subgrantees use the methods described in the EPA "Region 5 Model" and/or the Water Erosion Prediction Project (WEPP) computer model to estimate NPS load reductions. These models are described at websites <http://it.tetrattech-ffx.com/stepl/> and <http://forest.moscowsl.wsu.edu/fswepp/>, respectively. Subgrantees are required to contact DEP for review and approval if they plan to use an alternate estimation method.

NPS Projects that involve implementation apply BMPs at numerous NPS sites within the project watershed. Pollutant load reduction estimates are developed and reported as follows:

1. During design and/or installation of BMPs at NPS sites, appropriate field measurements are recorded to enable preparation of written estimates of pollutant load reductions;
2. Estimates are prepared for all NPS sites, unless there is not an applicable estimation method for a given site;
3. Estimates are checked for proper application of the method(s) and the results are summarized on a standard form provided by DEP titled "Pollutants Controlled Report" (PCR);
4. The PCR is submitted to the DEP Agreement Administrator, by December 31 of each year, until project completion. Information required in the PCR includes: a brief description of the NPS sites; name of the model used for each NPS site; and the model result for each NPS site. The PCR requires that Grantees sign the following statement: "The estimations in

this report were determined using the appropriate estimation model(s) and applied according to the procedures prescribed for the model. To the best of my knowledge these are reasonable estimates using appropriate methods; Documentation is kept on file by the grantee and is available for review by DEP / EPA";

5. Documentation of the estimation procedures used for each NPS site are retained in the subgrantee project files: and
6. DEP reviews the documentation during an annual on-site inspection.
7. Annually by February 15<sup>th</sup>, MDEP enters the load reduction estimates into EPA national Grant Reporting & Tracking System (GRTS) according to national NPS Program Guidelines.

#### Use of Secondary Data

NPS projects that develop a "watershed management plan" often involve compilation and use of pre-existing data (secondary data) about the watershed and waterbodies. If a NPS project depends on the use of secondary data, then a task in the workplan will require the subgrantee to specify the methods used to evaluate the quality /validity of the data to determine if the data is acceptable for the purposes of the NPS project. All such secondary data must be available for review by DEP program staff on request.

#### Project Oversight and Assessment

A DEP Agreement Administrator (AA) is assigned to guide each pass-through project and to monitor subgrantee performance under the Grant Agreement. The AA will help ensure that work is carried out according to the work plan by conducting site visits, reviewing deliverables and invoices, maintaining regular contact with subgrantees and assistance to resolve problems. Regarding specific NPS sites, the AA periodically contacts the subgrantee or visits NPS sites to review the design and installation of BMPs. In addition, subgrantees provide a brief "NPS Site Report" with photographs to document BMP installation at each NPS site. The AA contacts the NPS program coordinator as needed to help resolve problems. Agreement Administrator responsibilities, problem resolution procedures and "NPS Site Reports" are described in the DEP document, NPS Grant Administrative Guidelines.

#### Reports and Deliverables

Under the grant agreement, MDEP requires that subgrantees submit deliverables and semi-annual reports to document progress throughout the project period and a final project report upon completion of the project. The final project report includes: project overview; task summary; deliverables summary; project outcomes; and a budget summary. DEP provides project deliverables and progress and final project reports to EPA.

### V. Documentation, Records, and Data Management

MDEP tracks all grant agreements (subgrants) and maintains a filing system for documents and records on each NPS project. All documents for each project are stored in the NPS Project File. MDEP has "Standard Operating Procedures For Filing Documents and Records Pertaining to

Nonpoint Source Projects for the Bureau of Land & Water Quality" (SOP). This SOP applies to all DEP staff who develop or utilize Nonpoint Source Project Files funded through the NPS Grants Program. This helps to ensure that NPS Project files are properly created and maintained, contain pertinent documents and records, and are readily accessible by DEP personnel. MDEP retains a NPS project file on each project for at least 5 years. Grant Agreements (subgrants) require that subgrantees retain all NPS project documents in a file for at least 5 years following project closeout.

DEP retains all documents pertaining to the EPA Section 319 grant award to Maine (included in the performance partnership grant) for at least seven years in accordance with EPA regulations.

## VI. Continuous Improvement of the Maine Nonpoint Source Management Program

The Maine NPS program is guided by the original EPA-approved 1989 document "Maine Nonpoint Source Pollution Management Program". This document has been updated in 1995 and 1999. Additional updates are planned although not currently scheduled. Through this update process, the state seeks to continually improve the program and maintain program relevancy to current challenges.

The MDEP Watershed Management Division develops an annual work plan describing NPS work for each year. The MDEP NPS Management Program - Annual Report summarizes accomplishments of the MDEP Nonpoint Source Program. DEP uses this document to help assess the overall performance of the program and develop plans for NPS program work in upcoming years. The MDEP Watershed Management Division meets 6 times/year and the Division section managers meet 2/month to assess and plan work activities. In November DEP holds a one-day "Watershed Managers Roundtable" meeting to share information regarding NPS projects and other related watershed or water quality work. MDEP uses a quarterly newsletter (NPS Times) to help inform and communicate with citizens, watershed managers, and other professionals involved in NPS work.

Several other broader planning processes provide additional opportunities for program review and improvement. These include: 1) the Performance Partnership Agreement between MDEP and EPA, re-signed every three years and reviewed annually, that describes in broad terms the tasks MDEP will accomplish with EPA funding. The PPA includes descriptions of 319-related performance objectives and actions. MDEP uses the biennial Section 305(b) and 303(d) assessments to help assess NPS programming and plan for future work.

In addition to this programmatic review, MDEP also evaluates the success of Section 319-funded projects individually to consider project effectiveness and to identify opportunities for improvement in program delivery. MDEP and EPA jointly review the Section 319 RFP, the 319 workplan format, and the status of 319-funded TMDL projects every year for any needed changes or improvements. This review provides an opportunity to modify the focus of pass-through projects, adjust priorities, and identify any new requirements.



**Attachments:**

- MDEP Request for Proposals FY 2006 Grants for Nonpoint Source Pollution Control Projects, April 2005 (or current year, as applicable).
- Grant Agreement Template.
- NPS Grant Administrative Guidelines - Maine Nonpoint Source Grants Program, October 15, 2004.
- Pollutants Controlled Report (form), 10/05.
- Standard Operating Procedures For Filing Documents and Records Pertaining to Nonpoint Source Projects for the Bureau of Land & Water Quality (BLWQ) 12/04.
- DEP Organization Chart